

CLAIMS

1. A seat back for a wheelchair comprising:

a shell which is rigid and curved, the shell having a back panel with two lateral sides, a first wing fastened in a first position to the back panel and projecting forward from one lateral side, and a second wing fastened in a second position to the back panel and projecting forward from the other lateral side, wherein the first position and the second position are adjustable to alter curvature of the shell;

a cushion attached to the shell and having a body which stretches and contracts to conform to alteration of the curvature of the shell; and

a fastener arrangement to attach the shell to a frame of the wheelchair.

2. The seat back as recited in claim 1 wherein the body of the cushion comprises a central section adjacent the back panel of the shell, a first lateral section extending from the central section adjacent the first wing, and a second lateral section extending from the central section adjacent the second wing, wherein the first and second lateral sections stretch and contract with changes in positions of the first wing and second wings.

3. The seat back as recited in claim 2 wherein the first lateral section and the second lateral section of the body of the cushion are pleated.

4. The seat back as recited in claim 1 wherein the body of the cushion has a first surface with a first plurality of grooves extending vertically and a second surface with a second plurality of grooves interleaved with the first plurality of grooves, wherein the first and second plurality of grooves enable the body to stretch and contract with changes in positions of the first wing and second wings.

5. The seat back as recited in claim 1 wherein the body is formed of a resilient foam material.

6. The seat back as recited in claim 1 wherein the cushion further comprises a cover of stretchable material encasing the body and including an element that attaches the cushion to the shell.

7. The seat back as recited in claim 1 wherein back panel of the shell comprises central portion from one side of which a first lateral portion extends at a forward angle, and from another side of which a second lateral portion extends at a forward angle.

8. The seat back as recited in claim 7 wherein the first wing is adjustably fastened to the first lateral portion, and the second wing is adjustably fastened to the second lateral portion.

9. The seat back as recited in claim 1 wherein the fastener arrangement comprises a plurality of fasteners each having a bracket attached the shell and a hook portion for engaging the frame of the wheelchair.

10. The seat back as recited in claim 9 wherein the bracket has a slot through which a threaded fastener passes into the shell.

11. The seat back as recited in claim 9 wherein the hook portion is separate from the bracket and has an aperture, the bracket has a slot, and a threaded fastener passing through the slot and into the aperture.

12. A seat back for a wheelchair comprising:

a shell which is rigid and curved, the shell including a back panel that has a central portion with one side from which a first lateral panel projects in a forward direction and with another side from which a second lateral panel projects in the forward direction, the shell further including a first wing fastened at a first position to the first lateral panel and a second wing fastened at a second position to the second lateral panel, wherein the first position and the second position are adjustable to alter a length of curvature of the shell;

a cushion attached to the shell and having a body of a resilient material, wherein the body comprises a central section adjacent the central portion of the shell, a first lateral section extending from the central section adjacent the first wing, and a second lateral section extending from the central section adjacent the second wing; and

a fastener arrangement to attach the shell to a frame of the wheelchair.

13. The seat back as recited in claim 12 wherein the body of the cushion stretches and contracts conforming to alteration of the length of curvature of the shell.

14. The seat back as recited in claim 13 wherein the cushion further comprises a cover of stretchable material encasing the body.

15. The seat back as recited in claim 12 wherein the first lateral section and the second lateral section are pleated.

16. The seat back as recited in claim 12 wherein the body of the cushion has a first surface with a first plurality of grooves extending vertically, and a second surface with a second plurality of grooves interleaved with the first plurality of grooves.

17. The seat back as recited in claim 12 wherein the fastener arrangement comprises a plurality of fasteners each adjustable along two axes and having a hook portion for engaging the frame of the wheelchair.

18. A seat back for a wheelchair comprising:

a shell which is rigid and curved, the shell having a back panel with two generally vertical sides, a first wing fastened in an adjustable position to the back panel and projecting forward from one vertical side, and a second wing fastened in an adjustable position to the back panel and projecting forward from the other vertical side;

a cushion attached to the shell and having a body of a resilient material, wherein the body comprises a central section adjacent the central portion of the shell, a pleated first lateral section adjacent the first wing, and a pleated second lateral section adjacent the second wing; and

a fastener arrangement to attach the shell to a frame of the wheelchair.

19. The seat back as recited in claim 18 wherein the cushion further comprises a cover of stretchable material encasing the body.

20. The seat back as recited in claim 18 wherein back panel of the shell comprises central portion from one side of which a first lateral portion extends at a forward angle, and from another side of which a second lateral portion extends at a forward angle, wherein the first wing is adjustably fastened to the first lateral portion, and the second wing is adjustably fastened to the second lateral portion.

21. The seat back as recited in claim 18 wherein the body of the cushion has a first surface with a first plurality of grooves extending vertically in the first lateral section and the second lateral section, and a second surface with a second plurality of grooves interleaved with the first plurality of grooves.

22. The seat back as recited in claim 18 wherein the fastener arrangement comprises a plurality of fasteners each adjustable along two axes and having a hook portion for engaging the frame of the wheelchair.